

REMARKS/ARGUMENTS

This communication is in response to the December 7, 2010 Non-Final Office Action. Claims 1-29 were previously canceled, without prejudice. Claims 30, 49 and 58 have been amended. No new matter has been added. Claims 30-62 remain pending in this application with claims 30 and 58 being the only independent claims. Reconsideration is respectfully requested in view of the arguments presented below.

Prior Art Rejections

Claims 30-41, 44-55, 57 and 59-62 are rejected as obvious over Kauranen et al. (U.S. Patent Application Publication No. 2004/0162077) in view of Gopikanth (U.S. Patent Application Publication No. 2003/0129971) and Park et al. (U.S. Patent No. 6,741,868).

Claims 42 and 43 are rejected as obvious over Kauranen et al. in view of Gopikanth, Park et al. and Stephenson et al (U.S. Patent No. 6,119,000).

Claim 56 is rejected as obvious over Kauranen et al., in view of Gopikanth, Park et al. and Pumadi et al. (U.S. Patent Application Publication No. 2002/0068565).

Claims 59-62 are rejected as obvious over Kauranen et al. in view of Gopikanth and Park et al.

Applicants submit that the present claimed invention is distinguishable over the prior art of record for at least the reasons discussed in detail below.

Independent Claim 30

Claim 30 calls for “transmitting more than one mobile radio operator identity, PLMN identity, on a single organization channel BCCII.” (emphasis added)

In the outstanding Office Action, the Examiner acknowledges that Kauranen et al. fails to disclose or suggest differentiating between core networks of different mobile radio providers, the respective identity of the network operator (PLMN identity) is provided in the radio access network (RAN or BSS) to the mobile radio subscriber by transmitting more than one mobile radio operator identity, PLMN identity. Nevertheless, the Examiner maintains that this missing limitation is taught

by Paragraph [0007] of Gopikanth. Applicant respectfully disagrees.

Gopikanth discloses a method to signal a set of service types supported by a certain PLMN towards a UE for consideration in PLMN selection. By doing so, the UE during the "PLMN selection process" may use this information provided by the radio access networks of the PLMNs to choose the PLMN which support the service requirements of the UE best. No disclosure or suggestion is found in Gopikanth that this information is broadcast by a single radio access network and also no mention that the PLMN identities of the different PLMNs are being broadcast on a single BCCH channel of the shared radio access network. There is no network sharing of any kind.

Specifically, paragraph [0007] of Gopikanth discloses only that "A particular service area may provide different communication services or different classes of service (e.g., different bandwidths, guaranteed/non-guaranteed bandwidth, etc.) either on the same PLMN or among different PLMNs. For example, one PLMN may allow for both voice and video communication sessions each having different bandwidths requirements. Or one PLMN in an area may provide bandwidths dedicated to video services or other high-speed services, while another PLMN in the same area may provide bandwidths for only voice services or other basic services." Despite the fact that different PLMNs may be used, Gopikanth fails to either disclose or suggest the transmission of more than one mobile radio operator identity, PLMN identity, on a single organization channel BCCH. As pointed out by the Examiner paragraph [0021] in Gopikanth discloses that "The PLMNs 202, 204, 206 may broadcast the system information with their respective class-of-service types in each of their communications 202a-c, 204a-c, 206a-c via the base transceiver stations." However, such broadcast transmission is by each PLMN identity separately, rather than more than one PLMN identity transmitted on a single organizational channel BCCH. Each PLMN (202, 204, 206) broadcasts its code (302, 304, 306) individually to all mobile stations in the area. {Paragraphs [0032]-[0033]} No suggestion or disclosure is found in Gopikanth for teaching "transmitting more than one mobile radio operator identity, PLMN identity, on a single organization channel BCCH," as found in claim 30.

Even assuming *arguendo* the Examiner is not persuaded by our arguments above, a *prima facie* case of obviousness has still not been established since no motivation is provided as to why one of ordinary skill in the art would modify Kauranen et al. in accordance with Gopikanth.

Independent Claim 58

Claim 58 was not rejected in view of the prior art. During a telephone conference call with the Examiner on December 22, 2010, he confirmed that claim 58 should have been rejected for the same reasoning as that of claim 30.

Claim 58 specifies "transmitting on the single organization channel BCCH more than one PLMN identity in a mobile radio system." This limitation is the method counterpart of that previously discussed above with respect to claim 30 and thus patentable over the prior art for at least similar reasons discussed above with respect to claim 30.

In addition, method claim 58 is further distinguishable over the prior art in that it provides "the subscriber/the subscriber terminal (13) selects a PLMN identity from the PLMN identities transmitted on the single BCCH channel." (emphasis added)

Thus, in contrast to the claimed invention that expressly calls for the subscriber/the subscriber terminal to make the PLMN identity selection, Kauranen et al. discloses that the RAN selects a Core Network for the user terminal. {paragraphs [0003]; [0017]} Since the selection of a Core Network for the user terminal in Kauranen et al. is determined in the RAN without any indication, whatever, from the terminal such selection is random from the possible multiple Core Networks. Specifically, the RAN makes the selection/determination of a user terminal which then forwards the request to one potentially serving Core Network at a time until finding a Core Network able to accept the request. {paragraphs [0003]; [0017]} If the selected PLMN/CN cannot serve the user, the CN informs the RAN, which then re-routes the initial message to another PLMN/CN to try if this can serve the user in question. {Paragraphs [0012]; [0017] & Fig. 3}

In accordance with the present claimed invention, since the subscriber/subscriber terminal itself makes the selection of a PLMN identity from the plural PLMN identities transmitted on the single BCCH channel, the choice of CN is proper without any guessing.

Dependent Claim 32

Claim 32 further specifies "wherein network elements of the core network (6, 7; 10, 11) (CN) are used for providing voice connections, whereas other network elements for providing IP connections (packet network) are each provided by the different operators." (emphasis added)

In rejecting claim 32 the Examiner states this limitation is taught by reference element numbers 120 and 124 in Figure 1 of Kauranen et al. However, MSC 121 and GGSN 124 in Figure 1 of Kauranen et al. are associated with the same operator (Core network 120), rather than different operators, as called for in claim 32.

Dependent Claims 35-40

Each of claims 35-40 states "the subscriber/the subscriber terminal (13) notifies the radio access network (9; 12) of the different core networks (6, 7; 10, 11) with which the connection is to be set up." Thus, the subscriber/the subscriber terminal notifies the RAN.

To the contrary, Kauranen et al. discloses just the opposite. That is, the RAN makes the selection/determination of a user terminal which then forwards the request to one potentially serving Core Network at a time until finding a Core Network able to accept the request. {paragraphs [0003]; [0017]}

Dependent Claim 38

Claim 38 is still further distinguishable over the prior art in that it states "wherein when a connection is requested, the subscriber/the subscriber terminal (13) notifies the radio access network (9; 12) of the different core networks (6, 7; 10, 11) with which the connection is to be set up, and that this notification occurs with the transmission of the network operator ID (PLMN ID) in the RRC CONNECTION REQUEST or the INITIAL DIRECT TRANSFER message in a mobile radio system operating according to a UMTS standard, wherein only a MCC of the PLMN identity is transmitted." (emphasis added)

In rejecting claim 38 the Examiner maintains that this limitation is taught by Kauranen et al. which discloses transmission of either the PLMN (which includes both MMC and MNC) or, alternatively, in the case of operators having dedicated radio frequencies only MNC are transmitted. (Paragraph [0040]) Therefore, Kauranen et al. fails to disclose or suggest only the MCC of the PLMN identity being transmitted, as found in claim 38.

Dependent Claim 39

Aside from the arguments above with respect to claims 35-40, claim 39 is still further

distinguishable over the prior art in that it states "wherein the PLMN identity is represented by an integer (1, 2, 3...n) or a bit string (e.g., "001"), and the actual PLMN identity is determined from the sequential order of transmission of the different PLMN identities on the BCCH."

Nothing in either Kauranen et al. or Park et al., either alone or in combination therewith, teach the PLMN identity being represented as an integer or a bit string, much less, that "the actual PLMN identity is determined from the sequential order of transmission of the different PLMN identities on the BCCH," as called for in claim 39.

Dependent Claim 40

In addition to the arguments discussed above with respect to claims 35-40, claim 40 further provides "wherein when a connection is requested, the subscriber/the subscriber terminal (13) notifies the radio access network (9; 12) of the different core networks (6, 7; 10, 11) with which the connection is to be set up, and that this notification occurs with the transmission of the network operator ID (PLMN ID) neither in the RRC CONNECTION REQUEST nor the INITIAL DIRECT TRANSFER message in a mobile radio system operating according to a UMTS standard." (emphasis added)

Kauranen et al. in paragraph [0042] calls for initial direct transfer to carry the message from the RAN to the CN. As previously mentioned with regard to the grouping of claims 35-40 above, claim 40 requires just the opposite, that is, the subscriber/the subscriber terminal to notify the RAN. Furthermore, Kauranen et al. discloses the use of "initial direct transfer" for carrying the message, while claim 40 expressly provides that the notification does not occur with the network operator ID in the INITIAL DIRECT TRANSFER message.

Dependent Claim 41

Claim 41 provides "wherein more than one PLMN ID is transmitted in a System Information Block 1 (SIB1) on the BCCH of a mobile radio system operating according to a UMTS standard or core network information of more than one core network is transmitted within an SIB1." (emphasis added)

Park et al. to which the Examiner refers teaches transmitting the information in the MIB, not the SIB, as in claim 41. (Col. 21, line 66 through Col. 22, 1. 1)

Dependent Claims 42 and 43

Claims 42 and 43 each specify "wherein a signal represented, for example, by a single bit is transmitted on the organization channel (BCCID) of the radio access network (9; 12) to indicate if the radio network resources administration unit provides the connection request of the subscriber/the subscriber terminal (13) with one of the core networks (6, 7; 10, 11) based on a IMSI of the subscriber terminal." (emphasis added)

The Examiner acknowledges that this limitation is not taught by either Kauranen et al. or Park et al., instead relying on yet a third prior art reference, Stephenson et al. Applicant respectfully disagrees. The combination of all three references still does not read on the present claimed invention which calls for "a single bit" based on the IMSI of the subscriber terminal. Stephenson et al. discloses (Col. 8, ll. 8-21) that the IMSI which is provided to the PLMN ID in the form of a TMSI is a four octet code, not a single bit.

Dependent Claim 46

Claim 46 further specifies "wherein additional PLMN IDs are always transmitted when a subscriber terminal (13) logs on to a mobile radio network for the purpose of registration, actually uses a service, or indicates its actual location to the mobile radio network." (emphasis added)

Kauranen et al. fails to mention whatever additional PLMN ID's, much less, when such additional PLMN ID's are to be transmitted. Kauranen et al. (paragraph [0040] to which the Examiner refers) does not disclose when either PLMN ID's or additional PLMN ID's are broadcast.

Dependent Claim 53

Claim 53 further provides "wherein the selection of the PLMN or of these core network elements is based on signaling default (yes or no) the selection by the subscriber terminal (13), based on the signaled PLMN ID." (emphasis added)

Nothing in Kauranen et al. either discloses or suggests selection of the PLMN ID by signaling default (yes or no) the subscriber terminal (13) to include in the selection of PLMN.

Dependent Claims 59 & 61

Claims 59 and 61 each call for "wherein the more than one PLMN ID is transmitted in a single Master Information Block (MIB) on the BCCH of the mobile radio system operating according to a UMTS standard or core network information of more than one core network is transmitted within the single Master Information Block (MIB)."

Applicants submit that claims 59 and 61 are distinguishable over Kauranen et al. which as discussed above with respect to claims 30 and 58, fails to disclose or suggest transmitting "more than one PLMN identity" or "more than one core network."

Dependent Claims 60 & 62

Claims 60 and 62 each specify "wherein the more than one PLMN ID is transmitted in System Information Type 3 (SI3) according to a GSM standard."

The transmission of the system information in Park et al. is in the master information block (MIB) (Col. 21 l. 66 through Col. 22, l. 1), rather than "in System Information Type 3 (SI3) according to a GSM standard," as called for in claims 60 and 62.

For at least the foregoing reasons, Applicants submit that claims 30-62 are patentable over the prior art of record and requests that the application be passed to issuance.

CONDITIONAL PETITION FOR EXTENSION OF TIME

If entry and consideration of the amendments above requires an extension of time, Applicants respectfully request that this be considered a petition therefor. The Assistant Commissioner is authorized to charge any fee(s) due in this connection to Deposit Account No. 14-1263.

ADDITIONAL FEE

Please charge any insufficiency of fees, or credit any excess, to Deposit Account No. 14-1263.

Respectfully submitted,
NORRIS McLAUGHLIN & MARCUS, P.A.

By _____

Christa Hildebrand
Reg. No. 34,953
875 Third Avenue - 8th Floor
New York, New York 10022
Phone: (212) 808-0700
Fax: (212) 808-0844
Facsimile: (212) 808-0844

5353317CH/CFC